

GenCore version 5.1.4_p5.4578
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OM nucleic - nucleic search, using sw model

Run On: April 4, 2003, 23:47:29 ; Search time 83 Seconds
(without alignments)
6384.788 Million cell updates/sec

Title: US-09-847-081B-1
Perfect score: 1728
Sequence: 1 agaaaccagaaagaacaac.....tcataaacctcaagttag 1728

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 441362 seqs, 15338381 residues

Total number of hits satisfying chosen parameters: 882724

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Database : Issued Patents_NA.*
1: /cgn2_6/ptodata/1/ina/5A_COMB.seq.*
2: /cgn2_6/ptodata/1/ina/5B_COMB.seq.*
3: /cgn2_6/ptodata/1/ina/6A_COMB.seq.*
4: /cgn2_6/ptodata/1/ina/6B_COMB.seq.*
5: /cgn2_6/ptodata/1/ina/PCTUS_COMB.seq.*
6: /cgn2_6/ptodata/1/ina/backfiles1.seq.*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	868	50.2	1826	1	US-08-579-667-5
2	858.6	49.7	1795	1	US-08-579-667-1
3	853.4	49.4	1814	1	US-08-579-667-7
4	842	48.7	1646	1	US-07-995-950-2
5	842	48.7	1646	1	US-08-300-582-2
6	811.2	46.9	1239	4	US-09-180-342-2
7	811.2	46.9	1316	1	US-08-579-667-3
8	415.2	24.0	1239	4	US-09-180-342-1
9	172	10.0	749	1	US-08-579-667-9
10	54	3.1	7218	1	US-08-232-463-14
11	52.4	3.0	114	2	US-08-260-546-10
12	52.4	3.0	114	4	US-09-436-068A-12
13	37.2	2.2	891	1	US-07-783-705A-11
14	37.2	2.2	1232	4	US-08-908-758-1
15	37.2	2.2	6918	1	US-07-783-705A-13
16	36	2.1	1959	3	US-09-166-460-1
17	36	2.1	1959	4	US-09-361-718-1
18	36	2.1	1959	4	US-09-398-395A-27
19	35.4	2.0	2468	1	US-08-468-036-19
20	35.4	2.0	2468	2	US-08-376-843-19
21	35.4	2.0	2469	1	US-08-447-500-3
22	35.4	2.0	2469	1	US-08-454-097-3
23	35.4	2.0	2469	1	US-08-453-866-3
24	35.4	2.0	2469	3	US-08-185-359-3
25	34.8	2.0	654	4	US-09-288-143-37
26	34	2.0	1056	4	US-09-134-001C-2655
27	33.4	1.9	25002	4	US-08-961-527-48

28	33.2	1.9	18475	4	US-08-961-527-38	Sequence 38, Appl
29	33	1.9	6265	4	US-09-129-112-3	Sequence 3, Appl1
30	33	1.9	98844	4	US-09-791-211-10	Sequence 10, Appl
31	32.8	1.9	1923	4	US-09-143-476-132	Sequence 192, App
32	32.8	1.9	1988	4	US-09-643-597-173	Sequence 173, App
33	32.8	1.9	12734	4	US-09-344-456-1	Sequence 1, Appl1
34	32.8	1.9	14078	4	US-09-433-262-1	Sequence 1, Appl1
35	32.8	1.9	14078	4	US-09-702-330-1	Sequence 1, Appl1
36	32.8	1.9	14578	3	US-08-859-694-1	Sequence 1, Appl1
37	32.6	1.9	363	2	US-08-967-101-30	Sequence 30, Appl
38	32.6	1.9	363	2	US-08-592-541-30	Sequence 30, Appl
39	32.6	1.9	363	3	US-09-124-698-30	Sequence 30, Appl
40	32.6	1.9	363	4	US-09-127-480-30	Sequence 30, Appl
41	32.6	1.9	363	4	US-08-496-841C-30	Sequence 30, Appl
42	32.6	1.9	363	4	US-09-124-523-30	Sequence 30, Appl
43	32.6	1.9	1449	4	US-08-858-207A-54	Sequence 54, Appl
44	32.6	1.9	5910	4	US-08-961-527-165	Sequence 165, App
45	32.6	1.9	28882	4	US-08-961-527-140	Sequence 140, App

ALIGNMENTS

RESULT 1
US-08-579-667-5
; Sequence 5, Application US/08579667
; Patent No. 5705624
; GENERAL INFORMATION:
; APPLICANT: Fitzmaurice, Wayne P.
; APPLICANT: Hellmann, Gary M.
; APPLICANT: Grill, Laurence K.
; APPLICANT: Kumagai, Monto H.
; APPLICANT: Della-Cioppa, Guy R.
; TITLE OF INVENTION: DNA SEQUENCES ENCODING ENZYMES USEFUL IN
; TITLE OF INVENTION: PHYTOENE BIOSYNTHESIS
; NUMBER OF SEQUENCES: 19
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Virginia C. Bennett
; STREET: 1211 East Morehead Street, PO Drawer 34009
; CITY: Charlotte
; STATE: No. 5705624th Carolina
; COUNTRY: USA
; ZIP: 28234
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/579,667
; FILING DATE:
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Bennett, Virginia C.
; REGISTRATION NUMBER: 37,092
; REFERENCE/DOCKET NUMBER: 627-196
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 919-420-2200
; TELEFAX: 919-881-3175
; INFORMATION FOR SEQ ID NO: 5:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1826 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: CDNA
; NAME/KEY: CDS
; LOCATION: 367..1596
; US-08-579-667-5

Query Match: 50.2%; Score 868; DB 1; Length 1826;
Best Local Similarity: 77.2%; Pred. No. 3.8e-239;

;; SOFTWARE: PatentIn Release #1.0, Version #1.30

;; CURRENT APPLICATION DATA: US/08/579,667

;; FILING DATE:

;; CLASSIFICATION: 435

;; ATTORNEY/AGENT INFORMATION:

;; NAME: Bennett, Virginia C.

;; REGISTRATION NUMBER: 37,092

;; REFERENCE/DOCKET NUMBER: 627-196

;; TELECOMMUNICATION INFORMATION:

;; TELEPHONE: 919-420-2200

;; TELEFAX: 919-881-3175

;; INFORMATION FOR SEQ ID NO: 7:

;; SEQUENCE CHARACTERISTICS:

;; LENGTH: 1814 base pairs

;; TYPE: nucleic acid

;; STRANDEDNESS: single

;; TOPOLOGY: linear

;; MOLECULE TYPE: cDNA

;; FEATURE:

;; NAME/KEY: CDS

;; LOCATION: 363..1592

;; US-08-579-667-7

Query Match 49.4%; Score 853.4; DB 1; Length 1814;
Best Local Similarity 76.5%; Pred. No. 5.9e-235;
Matches 1223; Conservative 0; Mismatches 266; Indels 110; Gaps 10;

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QY 141 TACAAGTATGTTTGTGATTAATAGCTGAGGTGAGAAGG-----TAACATAAAG 193
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 250 TAAATTTATTAATTTTATTAATTAACGAGGAGGAAGAAACAGAAACAGAAAG 309
QY 194 GAAAGCAAAACTTGGGAATGTTTATAGCACCAGGAGTTTCTGTTTCATGACATG 253
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 310 TAGACAAAACCTTGGAAATGTTTATAGAAAACCAAGGTTTCTGTTTCAA---ATGT 366
QY 254 CTGTTCTGTTGTTGGTGTGTTTCTCCACATTCGAGGTCTCGAATGGGACAGGATGCT 313
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 367 CTGTTGCTGTTGTTGGTGTGTTTCTC---CTGTGAAGTCTCAATGGGACAGGATTC 423
QY 314 TGATTCAGTCGAGAGGAAGAAACCGGCTTTTGTATCATCCAGGTTTCCTAGCTCGAGATA 373
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 424 TGAATTCAGTCGAGGAGGAAGAAACCGGTTTGTGATTCGTCGAGG-----CAT 471
QY 374 GGAATTTGATGGAATGGGAGAAATCAAGAAAGTGGGAGACAAAGGTGGAAATTTGGCT 433
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 472 GGAATTTAGTGTGCAATGAGAAACAAAGAGAGGTGTGAACAAAGGTTGGAATTTGG-- 529
QY 434 CTTTAATGCTGATCCAGATATTCATGCTTGGGTGATCAAGAACTGAAAAGGGAAGCA 493
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 530 ----- 529
QY 494 CTTTCTCTGACAGTCCAGTTTGGTGGCTAGCCAGCTGGAGAAAT---GACTGTGTCAT 550
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 530 ----TCTGTAGGTCGTCTATGTTGGCTACACCGCGGGAGAAATGGCGACGATGACAT 585
QY 551 CAGAGAAAAGGTGTATGATGTTGATTAAGCAGGCACCTTTAGTGAAGAGCAGCTGA 610
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 586 CAGACAGATGTTTATGATGTTGTTTAAACAAAGCAGCTTTAGTGAAGAGGCAAGTTGA 645
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 611 GATCTACCGATGATTTAGAAGTGAAGCCGGATATGTTGTTCCAGGGAATTTGGGCTGCT 670
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 646 GATCTGCTGATGTTTGAAGTGAAGCCGGAGATCCCTCTCCCGGGAATTTGAGCTGCT 705
QY 671 TGAGTGAAGCATATGATTCGTTTGGCGGAAGTATGTCAGAGTATGCCAAAGACATTTTACT 730
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 706 TGAGTGAAGCATATGATGATGTTGAGTGTAGTGTATGTCAGAGTATGCCAAAGACATTTTACT 765
QY 731 TAGGACCAAGCTAATGACCCAGAGAGAGAGAGCTATCTGGGCAATATATGTTGTTGT 790
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 766 TAGGACCAATGTTAATGACTCCAGAGAGAGAGAGGCTATTTGGGCAATATATGTTGTTGT 825
QY 791 GCAGGAGACGGATGAGCTGTTGATGGCCCTAATGTCATCCCAACATACTCCGACGCTT 850
```

RESULT 4

US-07-995-950-2

; Sequence 2, Application US/07995950

; Patent No. 5304478

; GENERAL INFORMATION:

; APPLICANT: Bird, Colin R.

; APPLICANT: Grieron, Donald

; APPLICANT: Schuch, Wolfgang W.

; TITLE OF INVENTION: DNA, CONSTRUCTS, CELLS AND PLANTS

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DB 826 GCAGGAGAACAGATGAACCTTGTGATGGCCCAAGCAGCATCACATGTACACCCCAAGCCT 885
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QY 851 TAGATAGTGGGAGACAGCTGGAGATATTTTTCAGTGGGGGGCCATTTGATATCTGCTG 910
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DB 886 TAGATAGTGGGAGACAGCCTTGAAGATGTTTTCAGCGGGGCGACCATTTGATATCTG 945
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 911 ATGCTGCTTTATCCGATATCTGCTCCAGATTTCCCTGTTGATATTCAGCCATTCAGAGATA 970
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 946 ATGCTGCTTTGTCGATATCTGTTCCAGCTTCCAGCTTCCAGCTTCCAGCTTCCAGAGATA 1005
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 971 TCATTGAAGGAATGCGTATGGACTTGTGGAATTCAGATACAAACTTTTCGATGAGCTAT 1030
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1006 TGATTGAAGGAATGCGTATGGACTTGAAGATTCAGATACAAACTTTTCGATGAGCTTT 1065
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1031 ATCTCTATTGTTACTATGTTGCTGCTAGGATTTGATGATGTTGCTGATGATGATGATG 1090
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1066 ACCCTCTATTGTTACTGTTGCTGCTAGGATTTGATGATGATGATGATGATGATGATG 1125
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QY 1091 TTGCACCTGAATCAAAAGGCAACAGAGAGTGTATATAATGCTGCTTTGGCTTTAGGGC 1150
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1126 TTGCACCTGATTCAAAAGGCAACAGAGAGCTATATAATGACAGCTTTGGCTTTAGGAA 1185
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1151 TTGCACCTGATTCAAAAGGCAACAGAGAGTGTAGGAGAGATGTCAGAGAGAGAGAGAG 1210
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1186 TCGCAATCAACTAAGCAACATCTAGGATTTGAGAGAGATGTCAGAGAGAGAGAGAGAG 1245
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1211 TATACTTGGCTCAAGATGAATTAGCAGCAGGAGGCTCTCCGACGAGAGATATTTGCTG 1270
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1246 TCTACTTACCTCAAGATGAATTAGCAGCAGGAGGCTCTTCGACGATGACATATTTGCTG 1305
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1271 GAAGAGTACTGATAGTGGAGAACTTTATGAAGAAACAAATTCAGAGAGGCGAGGAAAT 1330
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1306 GAAAAGTCTACTGATAGTGGAGAGCTTTATGAAGAGCAAAATCCAGAGGCGCAAGAAAT 1365
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1331 TCTTTGATGAGTCAGAGAGAGGTTGTCAGAGAACTGACACTGCTGCTAGTATGCTGCTGT 1390
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1366 TCTTCGATGAGGAGAGGAGGAGGTTTACCAACTGAGCTGAGCTAGCAGATGCGCTGTAT 1425
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1391 TAACAGCGTCTGTTGTTATCGCAAGATATTTGACAGAGATTTGAAGCAACGACATACAACA 1450
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1426 GGGCATCTTTGCTGTTGTTACCCCAATACTGGACGAGATTTGAAGCAATGACTACAACA 1485
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1451 ACTTCACAGAGAGGCTTATGTTAGCAAGCAAGAAAGCTTCTCAGCTTGCCTTGCCTT 1510
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1486 ACTTCACAAAGAGAGCTTATGTCAGCAACCAAGAGAGCTTAATTTCTTACCTATTGCTT 1545
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
QY 1511 ATGCAAAATCTCTGTCGCCCTTAATAGAACT--TCTCTCCACTACCAAGAGACATGAATG 1569
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1546 ATGCAAAATCTCTGTCGCCCTTACCAAGAACTCTTCTCAGCTAGCTAGGATAGACA 1605
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QY 1570 AAGTAGTTGAGTCAATG-----AGTATTATACACTAAAGAACTCAGTACTTGTAAA 1622
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1606 TCAGATTTAAATTAAGCAAGAAAGCATATATTACTATTAAAGAAAGAAATTTCTAAA 1665
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QY 1623 TCAGATATATCTTT-----TGCTAAATGTTATCATCAAAAGTAGATTGT-AAAATCAAT 1674
    ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| ||| |||
DB 1666 GTAGATATTGTTGATGATGCTTGTATATCATCAAAAGTAGGTAGTAAATCAAT 1725
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QY 1675 ATGCAAACTCTCTGTTGAGATATTTTCTCCACACTCATC 1713
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DB 1726 ATAACAATCTAGTAGTGTATGTTTCAACATCTTAAGC 1764
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```

; TITLE OF INVENTION: DERIVED THEREFROM
 ; NUMBER OF SEQUENCES: 6
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Cushman, Darby & Cushman
 ; STREET: 1615 L Street, N.W.
 ; CITY: Washington
 ; STATE: D.C.
 ; COUNTRY: U.S.A.
 ; ZIP: 20036-5601
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Floppy disk
 ; COMPUTER: IBM PC compatible
 ; OPERATING SYSTEM: PC-DOS/MS-DOS
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/07/995,950
 ; FILING DATE:
 ; CLASSIFICATION: 800
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US/07/625,664
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Kokullis, Paul N.
 ; REGISTRATION NUMBER: 16,773
 ; REFERENCE/DOCKET NUMBER: PNK/3893/82895/MJW
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 202-861-3000
 ; TELEFAX: 202-822-0944
 ; TELEX: 248453 cush
 ; INFORMATION FOR SEQ ID NO: 2:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 1646 base pairs
 ; TYPE: nucleic acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: cDNA
 ; US-07-995-950-2

Query Match 48.7%; Score 842; DB 1; Length 1646;

Best Local Similarity 74.3%; Pred. No. 1e-231;

Matches 1222; Conservative 0; Mismatches 330; Indels 92; Gaps 9;

QY 101 TATAATCGTTGAATAGTGGATAGACTCTAGTGGATATCTAC----AAGTATTGGTTTTT 157
 Db 53 TAATTTGTTGAGAGTGGAAATATTCTCTAGTGGGAATCTACTAGGAGTAATTTATTTT 112
 QY 158 TGATAAAATAGGCTGAGTGGAGGTAACATAAAGGAAAGACAAACAACTTGGGAATTGT 217
 Db 113 CTATAAATAAGTAAAGTTTGGAGGTGACA-AAAGAAAGACAAAAATCTTGGAAATGT 171
 QY 218 TTTAGACCCAGGTTCTTGTGTTTCATGAGCATGTCTGTGCTTTGTTGTTGTTGTTGTTT 277
 Db 172 TTTAGACAACCAAGT---TTTCTGTCTCAGAAATGCTGTGCTTCTGTTATGGTTGTTT 228
 QY 278 CTCCCATCCGAGGTTCCAAATGGGACAGGATTTGGATTTCAGTCCGAGAGAGGAAC 337
 Db 229 CTC---CTTGAGCTCTCAATGGGACAAAGTTTCATGGAATCAGTCCGGGAGGGAAC 285
 QY 338 GCGTCTTTGTATCATCCAGGTTCTCTAGCTCGAGATAGGAATTTGATGCGAATGGGAGAA 397
 Db 286 GTTTTGTGATTCATCAGG-----CATAGGAATTTGGTGTCCAAATGAGAGAA 333
 QY 398 TCAGAAAGGTGGGAGACAAAGGTGGAATTTTGGCTCTTTAAATGCTGATCCAAGATATT 457
 Db 334 TCAATAGAGCT----- 344
 QY 458 CATGCTTGGGTGATCAAGAACTGAAAGGGAAGCACTTCTCTGTACAGTCCAGTTGG 517
 Db 345 -----GGTGGAAAGCAAACTAAATAAGGACGGAATTTTCTGTACGGTCTGCTATT 396
 QY 518 TGCTAGCCAGCTGGAGAAATACATGTGTCATCAGAGAAAGGTTGTATGTGGTAT 577
 Db 397 TGGCTACTCCATCTGGAGACGGACGATGACATCGGAACAGATGGTCTATGATGTGTTT 456

QY 578 TAAAGCAGGAGCAGCTTTAGTGAAGAGGAGCAGCTGAGATCTACCGATGATTTAGAAGTGAAGC 637
 Db 457 TGAGGAGGAGCAGCCTTGGTGAAGAGGCAACTGAGATCTACCAATGAGTTAGAAGTGAAGC 516
 QY 638 CGGATATTGTTGTTCCAGGGAATTTGGCTTTGTTGAGTGAAGCATATATGTTGTGGCG 697
 Db 517 CGGATATACCTATTTCGGGGAAATTTGGGCTTTGTTGAGTGAAGCATATATGTTGTGGTG 576
 QY 698 AAGTATGTCAGAGTATGCAAAAGACATTTTACTTAGGAACCAAGCTAATACCCACAGAGA 757
 Db 577 AAGTATGTCAGAGTATGCAAAAGACGTTTAACTTAGGAACATATGCTAATGACTCCCGAGA 636
 QY 758 GAAGAAGAGTATCTGGGCAATATATGTTGGTGCAGAGAGAACGATGAGCTTTGTTGATG 817
 Db 637 GAAGAAGGCTATCTGGGCAATATATGTTGGTGCAGAGAACAGATCAACTGTTGTTGATG 696
 QY 818 GCCCTAATGATCCACATCACTCCGCAAGCTTTAGATAGTGGGAGACAGGCTGGAAG 877
 Db 697 GCCCAACGCAATCATATATTACCCCGCAGCTTAGATAGTGGGAAATAGGCTAGAAG 756
 QY 878 ATATTTTCACTGAGGCGCCCATTTTCATATGCTTGTGCTTATCCGATACTGCTCTCA 937
 Db 757 ATGTTTCAATGGGCGCCCATTTGACATGCTGATGGTCTTTGTCGATACAGTTTCTA 816
 QY 938 GATTTCTGTTGATATTTCAGCCATTTCAGAGATATGATTGAAGGAATGCGTATGACTTGT 997
 Db 817 ACTTTCCAGTTGATATTTCAGCCATTTCAGAGATATGATTGAAGGAATGCGTATGACTTGA 876
 QY 998 GGAATCCAGATACAAACCTTTTCGATGAGTATATCTCTATTGTTACTATGTTGCTGTA 1057
 Db 877 GAAATCGAGATACAAACCTTTTCGACGAACATATACCTTTATTGTTATTGTTGCTGTA 936
 QY 1058 CTGTAGGATTGATGAGTGTCCAGTTATGGTATTGACCTTGCATGATCAAGGCAACACAG 1117
 Db 937 CGGTTGGTTGATGAGTGTTCCTCAATATGGGTATCGCCCTGGAATCAAGGCAACACAG 996
 QY 1118 AGAGTGTATATAATGCTGCTTTGGCTTTAGGGCTTGCAAACTCAACCAATATACATCA 1177
 Db 997 AGAGCTATATAATGCTGCTTTGGCTCTGGGATCGCAAACTCAATTAACATACATCA 1056
 QY 1178 GAGATGAGAGAGATGCGCAGAGAGAGAGATATCTTGCCTCAAGATGAATTAGCAC 1237
 Db 1057 GAGATGTTGAGAGAGATGCGCAGAGAGAGAGATCTACTTGCCTCAAGATGAATTAGCAC 1116
 QY 1238 AGCAGGCTCTCGCAGAGACATATTTCTGGAAGAGTCACTGATAGTGGAGGACT 1297
 Db 1117 AGCAGGCTCTATCGATGAAGATATATTTGCTGGAAGGGTGACCGATAAATGGAGAACT 1176
 QY 1298 TTATGAAGAAACAAATTCAGAGGGGAGGAAATTTCTTTGATGAGTCAGAGAAAGGTGCA 1357
 Db 1177 TTATGAAGAAACAAATACATAGGCAAGAAAGTTCTTTGATGAGGAGAGAAAGGCGTGA 1236
 QY 1358 CAGAACTGGACTGTGCTAGTAGAGTGGCTGTGTTAAACAGCGCTGCTGTTGTTATCGCAAGA 1417
 Db 1237 CAGAAATGAGCTCAGCTAGTAGATTCCTGTATGGGATCTTTGCTCTGTACCGCAAAA 1296
 QY 1418 TATTGGACGAGATGGAAGCAACAGCTACAAACACTTCAACAGGAGGCTTATGTTAGCA 1477
 Db 1297 TACTAGATGAGTTGAAGCAATGATACAACTTCAACAAAGAGAGCATATGTGAGCA 1356
 QY 1478 AGCCTAAG-AAGCTTCTCAGCTTGCCTTGCCTTATGCAAAATCTTTGTCGCCCTAAT 1536
 Db 1357 AATCAAGAGAGTTGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1416
 QY 1537 AGAATCTCTCTCCATGCAAGAGACATGAATGAAGTAGTTGAGTCAATAGTATTATAC 1596
 Db 1417 AAAGTCTCTCTCTCAAGAGATGAAGCATGAATGAAGTATATATATATATATATATAGC 1476
 QY 1597 ACT-----AAAGAACTCAGTACTTGTAAATGAGATATCTTTGCTAAATGCTPAT 1648
 Db 1477 AATGTACATTGAGAGAAAAAGGAGAAATGTTGTTGTTGTTGTTGTTGTTGTTGTTGTTGTT 1536

QY 1649 CATCAAAAGTAGTGT-----AAATTCAATATGACATCTCTGTGTAGATAATTTCTCC 1704
DB 1537 CATAAATATTAGTGTGTAGTACATCTCAATATATATCTCTGTGTAGTGTGTATCTTC 1596
QY 1705 ACATCATCAAAACCTCAAGTGAG 1728
DB 1597 ACTTTATCTCAACTCTTTGAGAG 1620

RESULT 5
US-08-300-582-2
; Sequence 2, Application US/08300582
; Patent No. 5750865
; GENERAL INFORMATION:
; APPLICANT: BIRD, COLIN R.
; APPLICANT: GRIERSON, DONALD
; APPLICANT: SCHUCH, WOLFGANG W.
; TITLE OF INVENTION: DNA, CONSTRUCTS, CELLS AND PLANTS
; TITLE OF INVENTION: DERIVED THEREFROM
; NUMBER OF SEQUENCES: 6
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: CUSHMAN DAREY & CUSHMAN
; STREET: 1100 NEW YORK AVENUE, N.W.
; CITY: WASHINGTON
; STATE: D.C.
; COUNTRY: U.S.A.
; ZIP: 20005-3918
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: PatentIn Release #1.0, Version #1.25
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/300,582
; FILING DATE:
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US 07/859,523
; FILING DATE: 12-AUG-1992
; ATTORNEY/AGENT INFORMATION:
; NAME: KOKULIS, PAUL N.
; REGISTRATION NUMBER: 16,773
; REFERENCE/DOCKET NUMBER: 3893/95874
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (202) 861-3000
; TELEFAX: (202) 822-0944
; TELEX: 6714627 CUSH
; INFORMATION FOR SEQ ID NO: 2:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1646 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; US-08-300-582-2

Query Match
Best Local Similarity 48.7%; Score 842; DB 1: Length 1646;
Matches 1222; Conservative 0; Mismatches 330; Indels 92; Gaps 9;

QY 101 TATAATCGTTGAATAGTAGGAGTCTCTAGTGTGATATCTAC---AAGTATTGGTTTT 157
DB 53 TAAATTTGTTGAGAGTGGAAATCTCTAGTGGAACTACTAGGAGTAATTTATTTT 112
QY 158 TGATAAATAGCGTCAGGTGAGAGGTAAACATAAAGGAAAGACAAAACCTTGGGAATGT 217
DB 113 CTATAAAGTAAGTAAAGTTTGGAGGTGACA-AAAGAAAGACAAAATCTTGGAAATGT 171
QY 218 TTTAGACCAACCGAGTTCTTGTGTTTCATGAGCATGTCTGTGTTGTTGTTGGTGTGTT 277
DB 172 TTTAGAACCAACCAAGT---TTTCTGCTCAAGATGTCTGTGTTGTTGTTGGTGTGTT 228
QY 278 CTCCCACTCCGAGTCTCGAATGGGACAGGATTTGGATTTCAGTCCGAGAAGAAACC 337

DB 229 CTC---CTTGTGAGCTCTCAATATGGGACAGTTTCATCGAATCAGTCCTCGGAGGAAACC 285
QY 338 GCGTCTTTGTATCATCCAGGTTCTCTAGTCGAGATAGGAATTTGTATGTGGAATGGAGAA 397
DB 286 GTTTTTTTGATTTCATCGAGG-----CATAGGAATTTGTGTCTCAATGAGAGAA 333
QY 398 TCAAGAAAGGTGGGAGACAAAGGTGGAAATTTTGGCTCTTTAATTCCTGATCCAGATATT 457
DB 334 TCAATAGAGGT----- 344
QY 458 CATGCTTGGGTGGTCAAGAACTGAAAGGGAAGCACTTTCTCTACAGTCACAGTTGG 517
DB 345 -----GGTGGAAAGCAAACTAATATGACGGAATTTTCTAGGCTGCTGATTT 396
QY 518 TGGTAGCCCCAGCTGGAGAAATGACTGTCTCATCAGAGAAAGGTGTATGATGTTGAT 577
DB 397 TGGCTACTCCATCTGGAGAACGGAGATGACATCGGAACAGATGTCTATGATGTTGTT 456
QY 578 TAAAGCAGGAGCTTTAGTGAAGAGGAGCTGAGATCTACCGATGATTTAGAGTGAAGC 637
DB 457 TGAGGCAGGCAGCCTTGGTGAAGAGGCAACTGAGATCTACCAATGAGTTAGAAGTGAAGC 516
QY 638 CGGATATTGTTTCCAGGGAATTTGGGCTTGTTCAGTGAAGCATATGATCCTTGTGGG 697
DB 517 CGGATATACCTATTCCGGGGAATTTGGGCTTGTTCAGTGAAGCATATGATGTTGGTG 576
QY 598 AAGTATGTGCAGAGTATGCAAGACATTTTACTTAGGAACCAAGTAATGACCCAGAGA 757
DB 577 AAGTATGTGCAGAGTATGCAAGACGTTTAACTTAGGAACATATGTAATGACTCCGAGA 636
QY 758 GAAGNAGAGCTATCTGGCAATATATGTGTGTGCAGAGACGATGAGCTTGTGATG 817
DB 637 GAAGAAGGCTATCTGGCAATATATGTGTGCAGAGAACAGATGAACCTTGTGATG 696
QY 818 GCCCTAATGATCCACATAACTCCGCAAGCTTTAGATAGTGGGAGACGAGCTGGAAG 877
DB 697 GCCCAAGCATATATATTACCCGGCAGCTTAGATAGTGGGAAATAGGCTAGAG 756
QY 878 ATATTTTCAGTGGGGCCATTTGATATGTTGATGCTGCTTTATCCGATAGTCTCCA 937
DB 757 ATGTTTCAATGGGCGGCATTTGACATGCTGATGCTGCTTTGTCGATACAGTTTCTA 816
QY 938 GATTTCTGTTGATATTCAGCCATTCAGAGATATGATTCAGAGGAATGCTATGGACTCT 997
DB 817 ACTTCCAGTTGATATTCAGCCATTCAGAGATATGATTCAGAGGAATGCTATGGACTTGA 876
QY 998 GGAATCCAGATACAAAACCTTTTCGATGAGCTATATCTCTATTGTTACTATGTTGCTGTA 1057
DB 877 GAAATCGAGATACAAAACCTTCGACGAACATATACCTTTATTGTTATGTTGCTGTA 936
QY 1058 CTGTAGGATTCAGTGTTCAGGTTATGGGTATTCACCTGAAATCAAGGCAACAG 1117
DB 937 CGGTTGGGTTGATGAGTGTCCCAATTTATGGGTATCGCCCTGAAATCAAGGCAACAG 996
QY 1118 AGAGTGATATAATGCTGCTTTGGCTTTAGGCTTTGCAATCAACTACCATATACCTCA 1177
DB 997 AGAGCTATATAATGCTGCTTTGGCTTTGGGATCGCAATCAATTAACATACATCTCA 1056
QY 1178 GAGATGTAGGAGAGATGCCAGAGAGAGAGATATCTTGCCTCAAGATGAATTAGCAC 1237
DB 1057 GAGATGTGGAGAGATGCCAGAGAGAGAGAGTCTACTTGCCTCAAGATGAATTAGCAC 1116
QY 1238 AGGAGGCTCTCCGACGAAGACATATTTGCTGGAAGAGTACTGATAGTGGAGAACT 1297
DB 1117 AGGAGGCTCTTCCGATGAAGATATTTGCTGGAAGGCTGACCGATAAATGCAATCT 1176
QY 1298 TTATGAAGAAACAATTCAGAGGCGGAGAAATCTTTGATGATGAGTACAGAGAGCTGCA 1357
DB 1177 TTATGAAGAAACAATACATAGGCGAAGAAATCTTTGATGAGGACAGAGAAAGCGTGA 1236
QY 1358 CAGAACTGAGCTCTGCTAGTAGTGGCTGTGTTTACAGCGCTGCTGTTGTTATCGCAAGA 1417

607	QY	CTGAGATCTACCGATGATTTAGAAGTGAAGCCGGATATTGTTCTCCAGGGAATTTGGGC	666
280	Ddb	TTGAGATCTACTGATGATTTAGAAGTGAAGCGGAGATCCCTCTCCGGGGAATTTGAGC	339
667	QY	TTGTTGAGTGAAGCATATGATCGTTGTGGGAAGTATGTGCAGAGTATGCAAGACATTT	726
340	Ddb	TTGTTGAGTGAAGCATATGATAGGTGTAGGAAGTATGTGCAGAGTATGCGAAGACATTT	399
727	QY	TACTTAGGAACCAAGCTTAATGACCCGAGAGAGAAGAGCTATCTCGGCAATATATGTG	786
400	Ddb	TACTTTAGGAAGTATGCTAATGACTCCAGAGAGAAGAGGCTATTTGGGCAATATATGTA	459
787	QY	TGGTCGAGGAAGCGATGAGCTTGTGTATGGCCCTAATGCATCCCAACATACTCCGCAA	846
460	Ddb	TGGTCGAGAGACAGACGACTTGTGTATGGCCCGAATGCATACATATTACTCCACAA	519
847	QY	GCTTTAGATAGGTGGGAGACAGCGCTGGAAGATATTTTCAGTGGCGGCCATTGTGATATG	906
520	Ddb	GCTTTAGATAGTGGGAAGACCGGCTGGAAGATGTTTCAGTGGCGGCCATTGACATG	579
907	QY	CTTGATGCTGCTTTATCCGATACTGCTCCAGATTTTCCCTGTTGNATTTACGCCATTCAGA	966
580	Ddb	CTCGATGCTGCTTTGTCGGATACTGTTTCCAAGTTTCCAGTTGATATTCAGCCGTTTCA	639
967	QY	GATATTGATTGAAGAAATCGCTATGGACTTGTGAAATCCAGATACAAAACCTTTCGATGAG	1026
640	Ddb	GATATGATCGAAGGNAATGCGTATGAGCTTGAGGAAGTCGAGATACAGAAACTTTGATGAG	699
1027	QY	CTATATCTCTATTTGTTACTATGTTGCTGGTACTCTAGGATTTGATGTTCACGATTATG	1086
-700	Ddb	CTATACCTATATTGTTATTACGTTTGGTACAGTTGGTGTGATGAGTGTCCAAATTATG	759
1087	QY	GCTATTGCACCTGAATCAAGGCAACACAGAGAGTGTATATGCTGCTGTTTGGCTTTA	1146
760	Ddb	GSCATCGCACCTGAATCAAGGCAACACACAGAGAGTGTATATATGACAGCTTTGGCTTTG	819
1147	QY	GGGCTTGCAAATCAACTAACCAATATACTACAGATGTAGGAGAAGATGCCAGAAGGA	1206
820	Ddb	GGTATCGGAAATCAACTAACCAATCTCAGAGATGTGCGAGAAGATGCCAGAAGGA	879
1207	QY	AGAGTATACTTTCCTCAAGATGAATTAGCACAGCGAGGCTCTCCGACGAAGACATATTT	1266
880	Ddb	AGAGCTACTTACCTCAAGATGAATTAGCACAGCGAGCTCTCTCCGACGATGACATATTT	939
1267	QY	GCTGGAAGAGTACTGATTAAGTGGAGAACTTTATGAAGAAACAAATTCAGAGGCGGAGG	1326
940	Ddb	ACTGGAAGAAGTACTGATTAATGGAGAGCGTTTATGAAGAAGCAATTTCCAGAGGGCAAGA	999
1327	QY	AAATTTCTTTGATGAGTCAGAAAGGTGTCTACAGAACTGGACTCTGCTAGTAGTGCCT	1386
1000	Ddb	AAGTTCTTCAATGAGCGAGAGGAAGAGTTACAACTGAGCTCAGCTACGACATGCGCT	1059
1387	QY	GTGTTTAACAGCGCTGCTGTTGTATCGCAAGATATTGGACGAGATTGAAGCAACGACTAC	1446
1060	Ddb	GTAATGGGCATCTTTGCTGTTGTACCGCCAAATACTCGACGAGATCGAAGCCAATGACTAC	1119
1447	QY	AACAACTTCACAAGGAGGCTTATGTTTAGCAAGCCAAAGAGCTTCTCACTTGGCCCAT	1506
1120	Ddb	AACAACTTCACAAGAGAGCTTATGTGTAGCAAAATCAAGAAGCTAAATTTCTCTACCTATT	1179
1507	QY	GCTTATGCAAAATCTCTTGTGCCCTTAATAGAAGT	1542
1180	Ddb	GCTTATGCAAAATCTCTTGTGCCCTTACAAGAACT	1215

RESULT 8
US-09-180-342-1
; Sequence 1, Application US/09180342A
; Patent No. 6239331
; GENERAL INFORMATION:
; APPLICANT: Drake, Caroline R.
; APPLICANT: Bird, Colin R.


```

; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/260,546
; FILING DATE: 16-JUN-1994
; CLASSIFICATION: 435
; ATTORNEY/AGENT INFORMATION:
; NAME: Halluin, Albert P.
; REGISTRATION NUMBER: 25,227
; REFERENCE/DOCKET NUMBER: 8129-086-999
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 415-854-3660
; TELEFAX: 415-854-3694
; TELEX: 66141 PENNIE
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 114 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: unknown
; TOPOLOGY: unknown
; MOLECULE TYPE: DNA (genomic)
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 28...114
; US-08-260-546-10

Query Match
Best Local Similarity 3.0%; Score 52.4; DB 2; Length 114;
Matches 75; Conservative 0; Mismatches 16; Indels 3; Gaps 1;

QY 245 TGAGCATGCTCTGTTGGTGTGTTCTCCCACTTCCGAGGTCTCGAATGGGA 304
DB 23 TAAATATGCTCTGCTTGGCTTGTATGGTGTCTC---CTTGACGCTCTCAATGGGA 79

QY 305 CAGGATGTTGGATTCAGTCCGAGAGGAACCG 338
DB 80 CAAGTTTCATGAATCAGTCCGAGGAGGAACCG 113

RESULT 12
US-09-436-068A-12
; Sequence 12, Application US/09436068A
; Patent No. 6376752
; GENERAL INFORMATION:
; APPLICANT: KIMAGAI, MONTO H.
; APPLICANT: dellona-CIOPPA, GUY R.
; APPLICANT: DONSON, JONATHAN
; APPLICANT: HARVEY, DAMON A.
; APPLICANT: GRILL, LAURENCE K.
; TITLE OF INVENTION: THE CYTOPLASMIC INHIBITION OF GENE
; FILE REFERENCE: 0080100860S02
; CURRENT FILING DATE: 1999-11-08
; PRIOR FILING DATE: 1999-03-09
; PRIOR APPLICATION NUMBER: 09/265,576
; PRIOR FILING DATE: 1994-06-16
; PRIOR APPLICATION NUMBER: 08/260,546
; PRIOR FILING DATE: 1994-01-19
; PRIOR APPLICATION NUMBER: 08/184,237
; PRIOR FILING DATE: 1992-07-31
; PRIOR APPLICATION NUMBER: 07/923,692
; NUMBER OF SEQ ID NOS: 15
; SOFTWARE: FastSeq for Windows Version 3.0
; SEQ ID NO 12
; LENGTH: 114
; TYPE: DNA
; ORGANISM: Tomato mosaic virus
; FEATURE:
; NAME/KEY: CDS
; LOCATION: (28)...(114)
; US-09-436-068A-12

Query Match
Best Local Similarity 3.0%; Score 52.4; DB 4; Length 114;
Matches 75; Conservative 0; Mismatches 16; Indels 3; Gaps 1;

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Matches 75; Conservative 0; Mismatches 16; Indels 3; Gaps 1;

QY 245 TGAGCATGCTCTGTTGGTGTGTTCTCCCACTTCCGAGGTCTCGAATGGGA 304
DB 23 TAAATATGCTCTGCTTGGCTTGTATGGTGTCTC---CTTGACGCTCTCAATGGGA 79

QY 305 CAGGATGTTGGATTCAGTCCGAGAGGAACCG 338
DB 80 CAAGTTTCATGAATCAGTCCGAGGAGGAACCG 113

RESULT 13
US-07-783-705A-11
; Sequence 11, Application US/07783705A
; Patent No. 5429939
; GENERAL INFORMATION:
; APPLICANT: Misawa, No. 5429939ihiko
; APPLICANT: Kobayashi, Kazuo
; APPLICANT: Nakamura, Shigeyuki
; APPLICANT: Yamano, Shigeyuki
; TITLE OF INVENTION: DNA SEQUENCES USEFUL FOR THE
; TITLE OF INVENTION: SYNTHESIS OF CAROTENOIDS
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Ladas & Parry
; STREET: 26 West 61 Street
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10023
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 720Kb storage
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: N/A
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/783,705A
; FILING DATE: 19911023
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 1-103078
; FILING DATE: 21-APR-1989
; APPLICATION NUMBER: JP 2-53225
; FILING DATE: 05-MAR-1990
; APPLICATION NUMBER: US 07/519,011
; FILING DATE: 19-APR-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Schwadron, Janet I.
; REGISTRATION NUMBER: 33,778
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-708-1935
; TELEFAX: 212-246-5959
; INFORMATION FOR SEQ ID NO: 11:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 891 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid (plasmid DNA)
; US-07-783-705A-11

Query Match
Best Local Similarity 2.2%; Score 37.2; DB 1; Length 891;
Matches 69; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 967 GATATGATTGAAGGATCGGTATGGACCTTGTGGAAATCCAGATACAAAACCTTCGATGAG 1026
DB 292 GATCATCTGGAAGGCTTCGCCATGGATGTACCGGAGCCCAATACAGCCAACTGGATGAT 351

QY 1027 CTATATCTCTATTGTTACTATATGTTGCTGTAGTACTGTAGGATGATGATGATGATGATG 1086
DB 352 ACGCTGCGCTATTGTTGTTATGCTATCAGCTTGACGCGTGTGCGCTTGATGATGCGCAATCATG 411

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QY 1087 GG 1088

Db 412 GG 413

RESULT 14

US-08-908-758-1
; Sequence 1, Application US/08908758
; Patent No. 6429356
; GENERAL INFORMATION:
; APPLICANT: Calgene, Inc.
; TITLE OF INVENTION: METHODS FOR PRODUCING CAROTENOID COMPOUNDS AND SPECIALTY OIL
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Calgene, Inc.
; STREET: 1920 Fifth Street
; CITY: Davis
; STATE: CA
; COUNTRY: USA
; ZIP: 95616
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 1.44 MB
; COMPUTER: IBM PC
; OPERATING SYSTEM: Windows NT 4.0
; SOFTWARE: Microsoft Word For Windows 7.0a
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/908,758
; FILING DATE: 8-8-97
; CLASSIFICATION: 800
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: 60/024,145
; FILING DATE: 8-9-96
; ATTORNEY/AGENT INFORMATION:
; NAME: Donna E. Scherer
; REGISTRATION NUMBER: 34,719
; NAME: Carl J. Schwedler
; REGISTRATION NUMBER: 36,924
; REFERENCE/DOCKET NUMBER: 122-1
; TELEPHONE: (916) 753-6313
; TELEFAX: (916) 753-1510
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 1232 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA to mRNA
; US-08-908-758-1

Query Match 2.2%; Score 37.2; DB 4; Length 1232;
Best Local Similarity 56.6%; Pred. No. 0.55;
Matches 69; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 967 GATATGATTCAGGATCGCTATGCTGGAATCCAGATACAAACTTTCGATGAG 1026

Db 545 GATCATCTGGAGGCTTCGCCATGGATGTACGCGAGCGCAATACAGCCAACTGGATGAT 604

QY 1027 CTATATCTTATGTTACTATGTTGTTGTTAGTATGATGATGTTCCAGTTATG 1086

Db 605 ACGTCGCTATGCTATCATCAGTTGCAGGCGTTGTCGGCTTGATGATGCGGCAATCATG 664

QY 1087 GG 1088

Db 665 GG 666

RESULT 15

US-07-783-705A-13
; Sequence 13, Application US/07783705A
; Patent No. 5429939
; GENERAL INFORMATION:
; APPLICANT: Misawa, No. 5429939Ihiko

; APPLICANT: Kobayashi, Kazuo
; APPLICANT: Nakamura, Katsumi
; APPLICANT: Yamano, Shigeyuki
; TITLE OF INVENTION: DNA SEQUENCES USEFUL FOR THE
; TITLE OF INVENTION: SYNTHESIS OF CAROTENOIDS
; NUMBER OF SEQUENCES: 18
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Ladas & Parry
; STREET: 26 West 61 Street
; CITY: New York
; STATE: NY
; COUNTRY: USA
; ZIP: 10023
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Diskette, 3.50 inch, 720Kb storage
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: N/A
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/07/783,705A
; FILING DATE: 19911023
; CLASSIFICATION: 435
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: JP 1-103078
; FILING DATE: 21-APR-1989
; APPLICATION NUMBER: JP 2-53225
; FILING DATE: 05-MAR-1990
; APPLICATION NUMBER: US 07/519,011
; FILING DATE: 19-APR-1990
; ATTORNEY/AGENT INFORMATION:
; NAME: Schwadron, Janet I.
; REGISTRATION NUMBER: 33,778
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: 212-708-1935
; TELEFAX: 212-246-5959
; INFORMATION FOR SEQ ID NO: 13:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 6918 base pairs
; TYPE: NUCLEIC ACID
; STRANDEDNESS: double
; TOPOLOGY: linear
; MOLECULE TYPE: other nucleic acid (plasmid DNA)
; ORIGINAL SOURCE:
; ORGANISM: Erwinia uredovora
; STRAIN: 20D3
; CELL TYPE: unicellular organism
; FEATURE:
; NAME/KEY: CDS
; NAME/KEY: /gene="crt E"
; LOCATION: 225 to 1133
; IDENTIFICATION METHOD: by experiment
; OTHER INFORMATION: codes for geranylgeranyl
; OTHER INFORMATION: pyrophosphate synthase
; NAME/KEY: CDS
; NAME/KEY: /gene="crt X"
; LOCATION: 1143 to 2438
; IDENTIFICATION METHOD: by experiment
; OTHER INFORMATION: codes for zeaxanthin glycosylase
; NAME/KEY: CDS
; NAME/KEY: /gene="crt Y"
; LOCATION: 2422 to 3570
; IDENTIFICATION METHOD: by experiment
; OTHER INFORMATION: codes for lycopene cyclase
; NAME/KEY: CDS
; NAME/KEY: /gene="crt I"
; LOCATION: 3582 to 5060
; IDENTIFICATION METHOD: by experiment
; OTHER INFORMATION: codes for phytoene desaturase
; NAME/KEY: CDS
; NAME/KEY: /gene="crt B"
; LOCATION: 5096 to 5986
; IDENTIFICATION METHOD: by experiment
; OTHER INFORMATION: codes for phytoene synthase

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; NAME/KEY: CDS
; NAME/KEY: /gene-"crt z"
; NAME/KEY: /note-"on the complementary strand"
; LOCATION: 5925 to 6452
; IDENTIFICATION METHOD: by experiment
; OTHER INFORMATION: codes for @ e-carotene hydroxylase
; PUBLICATION INFORMATION:
; AUTHORS: Misawa, NO. 5429939ihiko
; AUTHORS: Nakagawa, Masaya
; AUTHORS: Kobayashi, Kazuo
; AUTHORS: Yamano, Shigeyuki
; AUTHORS: Izawa, Yuko
; AUTHORS: Nakamura, Katsumi
; AUTHORS: Harashima, Keiji
; TITLE: Elucidation of the Erwinia uredovora Carotenoid Biosynthetic Path
; TITLE: by Functional Analysis of Gene Products Expressed in Escheric
; JOURNAL: Journal of Bacteriology
; VOLUME: 172
; ISSUE: 12
; PAGES: 6704-6712
; DATE: DEC-1990
; US-07-783-705A-13

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Query Match      2.2%; Score 37.2; DB 1; Length 6918;
Best Local Similarity 56.6%; Pred. No. 1.3;
Matches 69; Conservative 0; Mismatches 53; Indels 0; Gaps 0;

QY 967 GATATGATTGAAGGATGCGTATGGACTTGTGGAATCCAGATACAAAACCTTTCGATGAG 1026
    |||  |||||  |||||  |||  |||  |||||  |||||  |||||
Db 5387 GATCATCTGGAAGGCTTCGCCATGGATGTACGGCAAGCGCAATACACCAACTGGATGAT 5446

QY 1027 CTATATCTCTATTCTTACTATGTTGCTGGTACTCTAGGATGATGAGTGTCCAGTTATG 1086
    |||||  |||  |||||  |||  |||  |||||  |||  |||||
Db 5447 ACGTGGCGTATTGCTATCATCGTTGCAGGCGTTGTCGGCTTGATGATGGCGCAATCATG 5506

QY 1087 GG 1088
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Db 5507 GG 5508

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Job time : 116 secs

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